What is claimed is:

1. A semiconductor light-emitting device comprising:

a semiconductor substrate having a rear surface on which a first electrode is formed;

a semiconductor layer including a light-emitting portion, that is formed on said semiconductor substrate;

dispersed electrodes individually formed on a part of a surface of said semiconductor layer, said dispersed electrodes making ohmic contact with said semiconductor layer;

a transparent conductive film formed so as to cover the surface of said semiconductor layer and said dispersed electrodes, said transparent conductive film electrically conducting with said dispersed electrodes; and

a pad electrode formed on a part of a surface of said transparent conductive film, said pad electrode electrically conducting with the transparent conductive film.

2. The semiconductor light-emitting device according to claim 1, wherein said dispersed electrodes are formed on the surface of said semiconductor layer around said pad electrode.

3. The semiconductor light-emitting device according to claim 1, wherein said dispersed electrodes are formed on the surface of said semiconductor layer at portions where said dispersed electrodes do not overlap said pad electrode.

4. The semiconductor light-emitting device according to claims 1, wherein said dispersed electrodes are not formed on the surface of said semiconductor layer at portions where said dispersed electrodes overlap said pad electrode.

5. The semiconductor light-emitting device according to claims 1, wherein said dispersed electrodes have a total plane area smaller than a plane area

of said pad electrode.

6. The semiconductor light-emitting device according to claim 1, wherein said dispersed electrodes have a total plane area in a range of 3% to 30% of an effective light-emitting area.

7. The semiconductor light-emitting device according to claims 1, wherein said light-emitting portion is made of AlGaInP.

8. The semiconductor light-emitting device according to claim 1, wherein said semiconductor layer is formed by a metal organic chemical vapor deposition method.

9. The semiconductor light-emitting device according to claim 1, wherein said transparent conductive film is made of indium tin oxide.

10. The semiconductor light-emitting device according to claim 1, wherein said pad electrode has a surface to be subjected to wire bonding, that is free of said transparent conductive film.

11. The semiconductor light-emitting device according to claim 1, wherein said pad electrode is disposed at a center of a top surface of said semiconductor light-emitting device.

12. An electrode for a semiconductor light-emitting device comprising:

dispersed electrodes formed on a part of a surface of a semiconductor layer including a light-emitting portion to make ohmic contact with said semiconductor layer;

a transparent conductive film formed to cover the surface of said semiconductor layer and said dispersed electrodes to electrically conduct with said dispersed electrodes; and

a pad electrode formed on a part of a surface of said transparent conductive film to electrically conduct with said transparent conductive film.

13. The electrode for a semiconductor light-emitting device according to claim 12, wherein said dispersed electrodes are formed on the surface of said semiconductor layer around said pad electrode.

14. The electrode for a semiconductor light-emitting device according to claim 12, wherein said dispersed electrodes are formed on the surface of said semiconductor layer at portions where said dispersed electrodes do not overlap said pad electrode.

15. The electrode for a semiconductor light-emitting device according to claims 12, wherein said dispersed electrodes are not formed on the surface of said semiconductor layer at portions where said dispersed electrodes overlap said pad electrode.

16. The electrode for a semiconductor light-emitting device according to claims 12, wherein said dispersed electrodes have a total plane area smaller than a plane area of said pad electrode.

17. The electrode for a semiconductor light-emitting device according to claim 12, wherein said dispersed electrodes have a total plane area in a range of 3 to 30% of an effective light-emitting area.

18. The electrode for a semiconductor light-emitting device according to claim 12, wherein said transparent conductive film is made of indium tin oxide.

19. The electrode for a semiconductor light-emitting device according to claim 12, wherein said pad electrode has a surface to be subjected to wire bonding, that is free of said transparent conductive film.

20. The electrode for a semiconductor light-emitting device according to claim 12, wherein said pad electrode is disposed at a center of a top surface of said semiconductor light-emitting device.

21. A method for fabricating an electrode for a semiconductor light-emitting device, comprising:

a first step of forming dispersed electrodes on a part of a surface of a semiconductor layer including a light-emitting portion to make ohmic contact with said semiconductor layer;

a second step of forming a transparent conductive layer to cover the surface of said semiconductor layer and said dispersed electrodes to electrically conduct with said dispersed electrode; and

a third step of forming a pad electrode on a part of a surface of said transparent conductive layer to electrically conduct said transparent conductive layer.

22. The method according to claim 21, wherein said dispersed electrodes are formed on the surface of said semiconductor layer around said pad electrode.

23. The method according to claim 21, wherein said dispersed electrodes are formed on the surface of said semiconductor layer at portions where said dispersed electrodes do not overlap said pad electrode.

24. The method according to claims 21, wherein said dispersed electrodes are not formed on the surface of said semiconductor layer at portions where said dispersed electrodes overlap said pad electrode.

25. The method according to claim 21, wherein said transparent conductive film is made of indium tin oxide.

26. The method according to claim 21, wherein said transparent conductive film is formed by a sputtering method, and said pad electrode by a vacuum vapor deposition method.

27. The method according to claim 21, wherein said pad electrode has a surface to be subjected to wire bonding, that is free of said transparent conductive film.

28. An LED lamp using the semiconductor light-emitting device according to any one of claims 1 to 11.

29. A light source using the LED lamp according to claim 28.